



## General Instructions

- Take lots of pictures as you take your carburetor apart. This will give you a reference of where things go.
- Using a cookie sheet with folded up sides will help keep parts from falling on the floor.
- We suggest not removing the throttle shaft, valves, or choke shaft unless they are corroded, or very dirty. These parts can be easily damaged and are difficult to re-assemble.
- Instruction sheets that come with our carburetor kits are somewhat generic. It may not match your parts exactly.
- Do NOT use WD-40 around your carburetor. It reacts with ethanol.
- Using Silicon Spray Lubricant on the gaskets will help with sticking in case you need to take the carburetor apart again.
- Be careful after taking the top of the carburetor off. Turning the carburetor upside down may cause parts to fall out and you won't know where they were.
- Screws and jets that are frozen can often be removed after heating outside the screw or jet.
- Stuck check balls can be removed by heating the outside of where the check ball resides and tapping the carburetor on the work bench.
- Do not discard any parts until complete done. You may have to refer for size, or matching.

### Cleaning:

- Clean with carburetor dis-assembled.
- Soak all parts except rubber & electrical in Simple Green for 2 hours. Aluminum parts will get discolored if left longer.
- Wash parts with hot water if available to remove all chemicals.
- Blow out each passage way taking special notice of the smaller ones. Test each passage that air goes through the entire passage.
- Blow out the idle mixture hole.

- Check any hole above the idle mixture hole (inside the bore). This is the idle discharge and often becomes plugged.
- A tooth brush can facilitate cleaning parts.
- Soda blasting, then washing again will make the carburetor look good any will clean any minor deposits.
- Any corrosion, or deposits that are hard to remove may indicate the passages are also corroded and the carburetor should be replaced.
- If your engine has been sitting for 6 months or more, the gas has probably turned, and the gas tank will need to be cleaned as well as the fuel lines. Flushing new gas through the tank will not be enough.

#### Assembly:

- Do NOT apply any gasket sealant on any of the gaskets. Gas will break sealant part and the particles will clog the small passages.
- Test your float.
  - Brass floats should be immersed into hot water. As the air inside expands any leak will be noticeable with air bubbles.
  - Plastic, or Nitrophyl floats should be weighed. The weight is in grams. Check our technical pages for any weight specification that we may have.
- Most gaskets will fit as expected, but you may have to trim some, especially under the venturis.
- Your kit may include multiple gaskets in order to get better coverage out of the kit. Use the one that fits the best. Look for any opening the gasket may leave allowing air into the carburetor. Some holes may be casting holes that don't lead to anything and do not have to be covered.
- Mounting gaskets for multiple bore carburetors do not have to have matching holes. Example a four-barrel gasket can be open in the middle instead of 4 holes as long as the carburetor has some kind of passage between bores. The passage is between primary, or secondary, not both.
- When adjusting the float be careful not to put any pressure on the needle. The viton tip is easily damaged.
- Most idle mixture screws can be cleaned using a soft wire wheel. Inspect for any scoring, which would indicate over tightening. Screw with scoring should be replaced.

#### Accelerator Pumps:

- On leather cups run your finger around the inside of the cup to break any manufacturer sealant.
- Apply 2 drops of oil to cups (leather, or rubber) before inserting into carburetor. Do not soak the cup in oil. The swelling of the cup needs to happen inside the carburetor. Allow the 2 drops of oil and the gas to do its job naturally.
- Twist the pump as you are inserting to help keep the cup from curling or folding over.
- Test your accelerator pump circuit before putting the top of the carburetor back on. Our technical pages have instructions on how to do this for most carburetor types.
- Pump wells are usually slight tapered, and the pump will not seal until it gets towards the bottom.

**REPLACEMENT  
STYLE UNIT**



**ORIGINAL  
STYLE UNIT**



**NEW DESIGN POWER VALVE**

THE REPLACEMENT POWER VALVE INCLUDED IN THIS PACKAGE MAY DIFFER IN APPEARANCE FROM THE ORIGINAL STYLE UNIT DUE TO CHANGES IN MANUFACTURING MATERIALS AND TECHNIQUES. IT MEETS OR EXCEEDS ALL QUALITY, PERFORMANCE, AND ECONOMY REQUIREMENTS WHILE EXTENDING SERVICE LIFE.

CARBURETOR PARTS

# INSTRUCTION SHEET

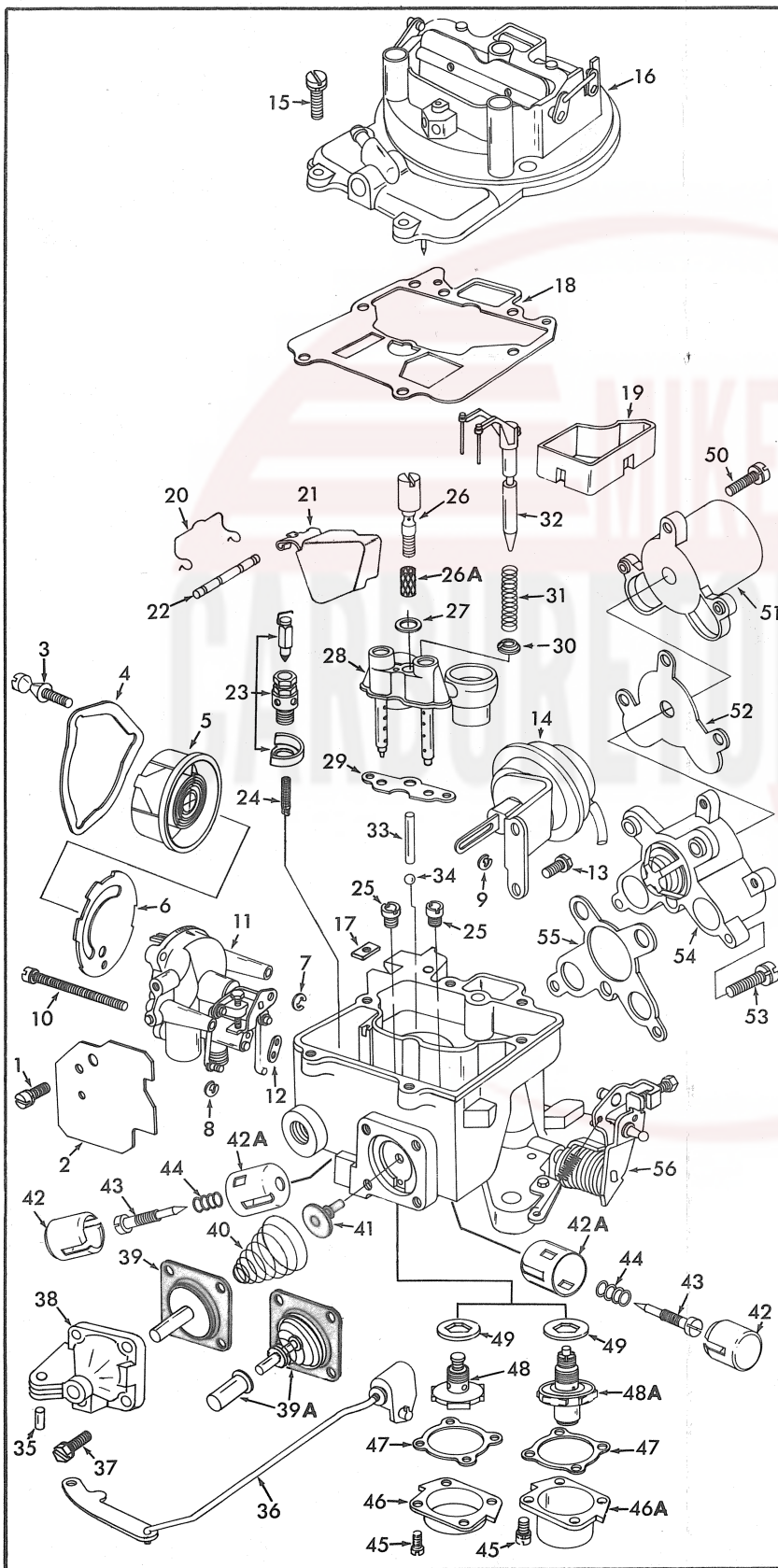
## MOTORCRAFT CARBURETOR - MODEL 2150

### (ANEROID ASSY. USED ON SOME MODELS)

50-602-1

#### GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET.



#### DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED. TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: NOT ALL MODELS WILL BE EQUIPPED WITH A FUEL BOWL SPACER OR WITH THE ANEROID ASSY. MODELS WILL ALSO DIFFER FROM A SINGLE STAGE TO A (TWO) STAGE ENRICHMENT VALVE.

PUMP DIAPHRAGM LEVER AND ROD ASSY. (36A) USED ON F.I.O.D. MODELS SHOULD NOT BE TAKEN APART. (FACTORY ADJUSTED AND SEALED.)

TO REMOVE CHOKE COVER CLAMP TAMPER PROOF SCREWS, CENTER PUNCH THE SCREW HEAD, THEN USING A 1/8" DRILL, DRILL THE SCREW HEAD DEEP ENOUGH TO REMOVE THE RETAINING RING. CAREFULLY REMOVE THE CAP (5) BY INSERTING A SHARP FLAT CHISEL BETWEEN THE LAYERS OF THE CHOKE CAP GASKET. REMOVE THE REMAINING PORTION OF THE CHOKE CAP RETAINING SCREWS WITH A LOCKING PLIERS. CLEAN ANY REMAINING EPOXY FROM THE MATING SURFACES WITH A GASKET SCRAPER.

TO REMOVE CAP (42) AND CUP (42A) FROM IDLE MIXTURE NEEDLE. SUPPORT THE AREA UNDER THE LIMITER PLUG AND USING A POINTED TOOL DIRECTED AT THE TANG, LIGHTLY TAP THE PLUG FORWARD. BEFORE REMOVING IDLE ADJUSTING NEEDLE, TURN IN CLOCKWISE COUNTING THE NUMBER OF TURNS IT TAKES TO LIGHTLY SEAT THE NEEDLE. RECORD FOR REASSEMBLY.

#### NOMENCLATURE

| REF. NO.                                        | REF. NO.                                         |
|-------------------------------------------------|--------------------------------------------------|
| 1. SCREW - AIR SHIELD                           | 34. BALL - PUMP DISC. BALL                       |
| 2. AIR SHIELD                                   | 35. PIN - PUMP LEVER                             |
| 3. SCREW (3) - CHOKE COVER CLAMP                | 36. PUMP LEVER & ROD ASSY.                       |
| 4. CLAMP - CHOKE COVER                          | 37. SCREW (4) - PUMP DIAPHRAGM COVER             |
| 5. CHOKE COVER & SPRING ASSY.                   | 38. COVER - PUMP                                 |
| 6. GASKET - CHOKE COVER                         | 39. PUMP DIAPHRAGM ASSY.                         |
| 7. RETAINER - CHOKE ROD                         | 39A. PUMP DIAPHRAGM ASSY. F.I.O.D.               |
| 8. RETAINER - FAST IDLE CAM ROD (LOWER)         | 40. SPRING - PUMP DIAPHRAGM RETURN               |
| 9. RETAINER - CHOKE PULLDOWN ROD                | 41. VALVE - PUMP INLET CHECK                     |
| 10. SCREW & LKWSHR. (3) - CHOKE HOUSING         | 42. CAP (2) - IDLE LIMITER                       |
| 11. CHOKE HOUSING ASSY.                         | 42A. CUP (2) - IDLE LIMITER                      |
| 12. GASKET - CHOKE HOUSING                      | 43. NEEDLE (2) - IDLE ADJUSTING                  |
| 13. SCREW (2) - CHOKE PULLDOWN ASSY.            | 44. SPRING (2) - IDLE ADJUSTING NEEDLE           |
| 14. CHOKE PULLDOWN MOTOR & HOSE ASSY.           | 45. SCREW & LKWSHR. (4) - ENRICHMENT VALVE COVER |
| 15. SCREW & LKWSHR. (6) - BOWL COVER            | 46. COVER - ENRICHMENT VALVE                     |
| 16. BOWL COVER ASSY.                            | 46A. COVER - ENRICHMENT VALVE (2 STAGE)          |
| 17. SEAL - CHOKE ROD                            | 47. GASKET - ENRICHMENT VALVE COVER              |
| 18. GASKET - BOWL COVER                         | 48. VALVE - ENRICHMENT                           |
| 19. SPACER - FUEL BOWL (USED WITH SHORT FLOAT.) | 48A. VALVE - ENRICHMENT (2 STAGE)                |
| 20. RETAINER - FLOAT PIN                        | 49. GASKET - ENRICHMENT VALVE                    |
| 21. FLOAT & LEVER ASSY.                         | 50. SCREW & LKWSHR. (3) - ANEROID ASSY.          |
| 22. PIN - FLOAT LEVER                           | 51. ANEROID ASSY.                                |
| 23. NEEDLE & SEAT, BAFFLE ASSY.                 | 52. GASKET - ANEROID ASSY.                       |
| 24. SCREEN - NEEDLE SEAT                        | 53. SCREW & LKWSHR. (4) - POPPET VALVE ASSY.     |
| 25. JETS (2) - MAIN METERING                    | 54. POPPET VALVE ASSY. - ALT.                    |
| 26. SCREW - PUMP DISCHARGE NOZZLE               | 55. GASKET - POPPET VALVE HOUSING                |
| 26A. SCREEN - PUMP NOZZLE SCREW                 | 56. MAIN BODY ASSY.                              |
| 27. GASKET - NOZZLE SCREW                       |                                                  |
| 28. VENTURI CLUSTER ASSY.                       |                                                  |
| 29. GASKET - VENTURI CLUSTER                    |                                                  |
| 30. RETAINER - AIR METERING ROD SPRING          |                                                  |
| 31. SPRING - AIR METERING ROD                   |                                                  |
| 32. AIR METERING ROD ASSY.                      |                                                  |
| 33. WEIGHT - PUMP DISC. BALL                    |                                                  |

#### CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PARTS CONTAINING RUBBER MATERIALS OR PARTS SUCH AS (5), (14), (21), (51), AND (54) IN CLEANING SOLVENTS.

#### REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

#### SPECIAL INSTRUCTIONS

ENRICHMENT VALVE (48) — USE CARE WHEN TIGHTENING TO PREVENT DISTORTION OF GASKET (49).

IDLE ADJUSTING NEEDLES (43) — TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT NUMBER OF TURNS RECORDED ON DISASSEMBLY. (DO NOT INSTALL CAPS (42) AT THIS TIME.)

PUMP INLET CHECK VALVE INSTALLATION (41) — LUBRICATE TIP OF NEW VALVE AND INSERT IN CENTER HOLE OF PUMP CAVITY. USE A NEEDLE NOSE PLIERS AND PULL THROUGH FROM FUEL BOWL SIDE UNTIL FULLY SEATED. CUT OFF VALVE TIP AT RETAINING SHOULDER.

PUMP DIAPHRAGM RETURN SPRING INSTALLATION (40) — INSTALL LARGE OPEN END OF SPRING OVER RUBBER INLET CHECK VALVE (41).

# ADJUSTMENTS

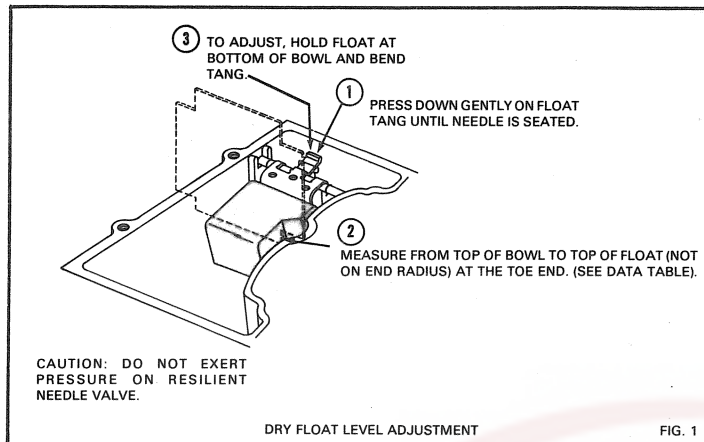


FIG. 1

| ADJUSTMENT DATA TABLE |                                    |                 |
|-----------------------|------------------------------------|-----------------|
| YEAR                  | APPLICATION                        | DRY FLOAT LEVEL |
| 1981                  | PASSENGER CARS                     | 7/16"           |
| 1981                  | TRUCK (LIGHT)                      |                 |
|                       | 5.0L ENG. ECONOLINE 49S            | 31/64"          |
|                       | 5.0L ENG. CANADA E-F, BRONCO 4 x 4 | 31/64"          |
|                       | ALL OTHER 4.2L & 5.0L ENG.'S       | 7/16"           |
|                       | 5.8L, V&M, ENG.'S                  | 31/64"          |
|                       | 6.6L Eng.                          | 31/64"          |

THE INFORMATION AND SPECIFICATIONS CONTAINED HEREIN ARE BASED ON LATEST PRODUCT INFORMATION AVAILABLE AT THE TIME OF PUBLICATION. THE RIGHT IS RESERVED TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE.

PLEASE REFER TO THE ENGINE DECAL, SERVICE SPECIFICATIONS AND TECHNICAL BULLETINS FOR REVISIONS TO THIS INFORMATION.

FIG. 2

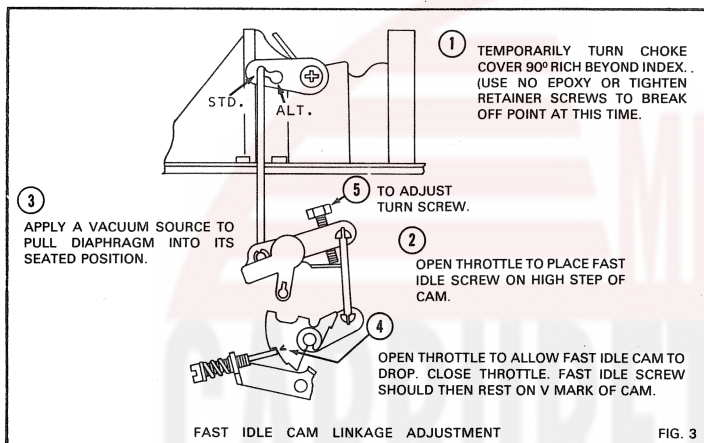


FIG. 3

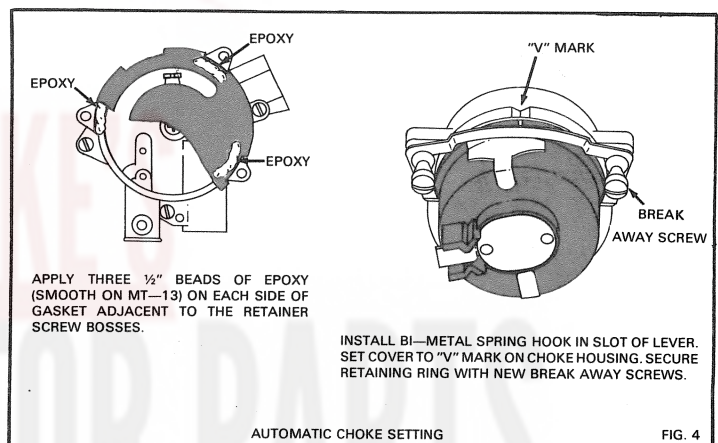


FIG. 4

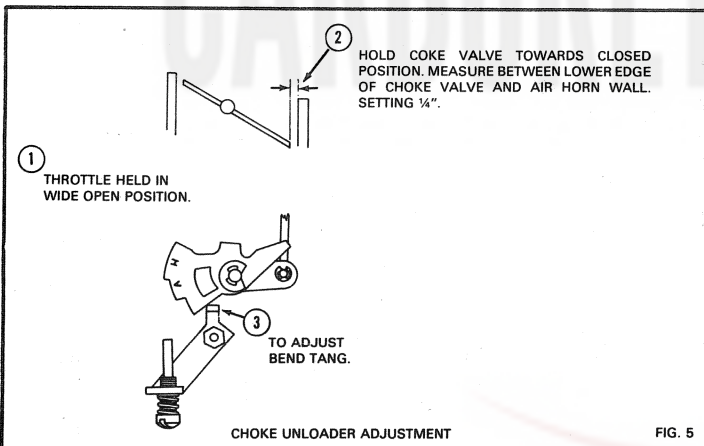


FIG. 5

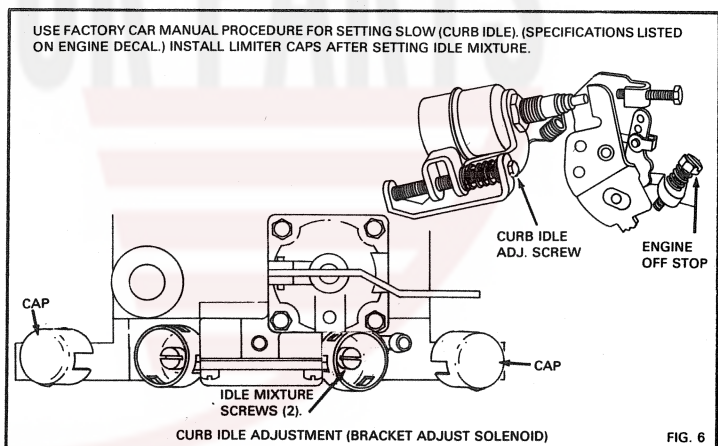


FIG. 6

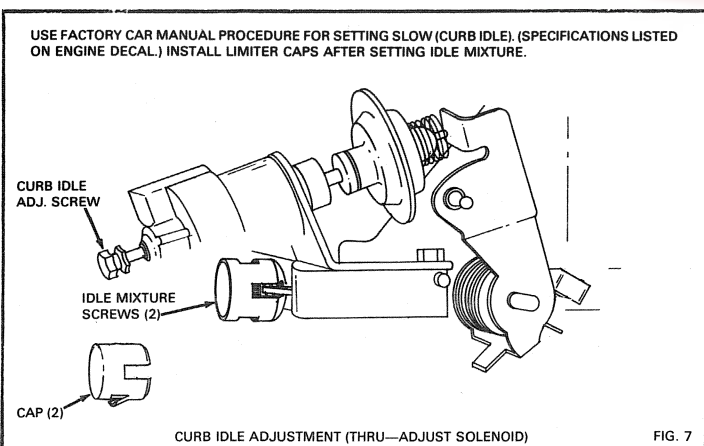


FIG. 7

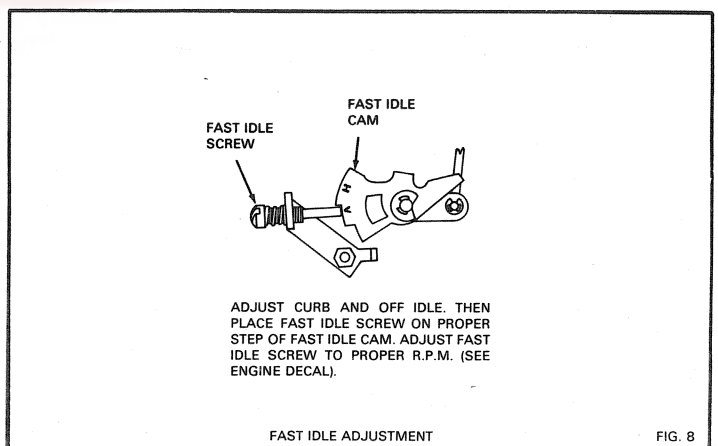


FIG. 8